We claim:

1. A computer-implemented method comprising:

constructing a plurality of item slot groups, each group having a number of item slots, each item slot initially unfilled and able to be filled by an item;

5   allocating each of a plurality of items of a first type over the item slots of the item slot groups that are unfilled by matching characteristics of the item to characteristics of the item slot groups, such that allocating an item to an item slot fills the item slot with the item;

allocating each of a plurality of items of a second type over the item slots of the item

10   slot groups that are unfilled by matching characteristics of the item to the characteristics of the item slot groups, such that allocating an item to an item slot fills the item slot with the item; and,

displaying the plurality of item slot groups as a histogram having a plurality of bars, where each bar corresponds to an item slot group and has a height corresponding to the

15   number of item slots of the item slot group, wherein the bar has indication as to how many of the number of item slots of the item slot group are filled and how many of the number of item slots of the item slot group are unfilled.

2. The method of claim 1, wherein each item comprises an ad and each item slot group comprises a web site, such that each item slot of the item slot group corresponds to an

20   advertising space on the web site on which an ad can be shown.

31

3. The method of claim 2, wherein the first type of the plurality of items comprises member ads, and the second type of the plurality of items comprises sponsor ads.

4. The method of claim 1, wherein each of the plurality of items of the first type has a fill quota, wherein allocating each of the plurality of the items of the first type comprises
5 filling a number of item slots of the item slot groups that are unfilled with the item equal to the quota.

5. The method of claim 4, wherein allocating each of the plurality of the items of the first type further comprises filling the number of item slots of the item slot groups that are unfilled with the item equal to the quota proportionally as to the item slots unfilled of the
10 item slot groups having characteristics matching the characteristics of the item.

6. The method of claim 1, wherein each of the plurality of items of the second type has a fill quota, wherein allocating each of the plurality of the items of the second type comprises filling a number of item slots of the item slot groups that are unfilled with the item equal to the quota.

15 7. The method of claim 6, wherein allocating each of the plurality of the items of the second type further comprises filling the number of item slots of the item slot groups that are unfilled with the item equal to the quota proportionally as to the item slots unfilled of the item slot groups having characteristics matching the characteristics of the item.

8. A computer-implemented method comprising:

constructing a plurality of item slot groups, each group having a number of item slots, each item slot initially unfilled and able to be filled by an item;

constructing a plurality of meta item slot groups, each meta group encompassing at

5   least one item slot group and having a number of item slots equal to a total number of item slots of the at least one item slot group the meta group encompasses, each item slot initially unfilled and able to be filled by an item;

allocating each of a plurality of items of a first type over the item slots of the meta item slot groups that are unfilled by matching characteristics of the item to characteristics

10   of the meta item slot groups, such that allocating an item to an item slot fills the item slot with the item;

allocating each of a plurality of items of a second type over both the item slots of the meta item slot groups that are unfilled and the item slots of the item slot groups that are unfilled by matching characteristics of the items to characteristics of the item slot groups,

15   such that allocating an item to an item slot fills the item slot with the item; and,

allocating of each of the plurality of items of the first type over the item slots of the item slot groups that are unfilled, such that allocating an item to an item slot fills the item slot with the item.

9. The method of claim 8, further comprising:

20   displaying the plurality of item slot groups as a first histogram having a plurality of bars, where each bar corresponds to an item slot group and has a height corresponding to the number of item slots of the item slot group, wherein the bar has indication as to how many of the number of item slots are filled and how many of the number of item slots are

33

unfilled; and,

displaying the plurality of meta item slot groups as a second histogram having a plurality of bars, where each bar corresponds to a meta item slot group and has a height corresponding to the number of item slots of the meta item slot group, wherein the bar

5 has indication as to how many of the number of item slots are filled and how many of the number of item slots are unfilled.

10. The method of claim 8, wherein each item comprises an ad, each item slot group comprises a web site, and each meta item slot group comprises at least one web site having similar characteristics, such that each item slot of the item slot group corresponds

10 to an advertising space on the web site on which an ad can be shown, and each item slot of the meta item slot group corresponds to an advertising space on a web site of the meta item slot group on which an ad can be shown.

11. The method of claim 10, wherein the first type of the plurality of items comprises member ads, and the second type of the plurality of items comprises sponsor ads.

15 12. The method of claim 8, wherein each of the plurality of the items of the first type and each of the plurality of items of the second type has a fill quota, wherein allocating each of the plurality of the items comprises filling a number of item slots that are unfilled with the item equal to the quota.

13. A computer-implemented method comprising:

20 constructing a plurality of sub item slot groups, each sub group having a number of

34

item slots, each item slot initially unfilled and able to be filled by an item;

constructing a plurality of item slot groups, each group encompassing at least one sub item slot group and having a number of item slots equal to a total number of item slots of the at least one sub item slot group the group encompasses, each item slot initially

5   unfilled and able to be filled by an item;

constructing a plurality of meta item slot groups, each meta group encompassing at least one item slot group and having a number of item slots equal to a total number of item slots of the at least one item slot group the meta group encompasses, each item slot initially unfilled and able to be filled by an item;

10   allocating each of a plurality of items of a first type over the item slots of the meta item slot groups that are unfilled by matching characteristics of the item to characteristics of the meta item slot groups, such that allocating an item to an item slot fills the item slot with the item;

allocating each of a plurality of items of a second type over the item slots of the meta

15   item slot groups that are unfilled, the item slots of the item slot groups that are unfilled, and the item slots of the sub item slot groups that are unfilled, by matching characteristics of the items to characteristics of the sub item slot groups, such that allocating an item to an item slot fills the item slot with the item; and,

allocating each of the plurality of items of the first type over the item slots of the item

20   slot groups that are unfilled and the item slots of the sub item slot groups that are unfilled, such that allocating an item to an item slot fills the item slot with the item.

14. The method of claim 13, displaying the plurality of item slot groups as a first histogram having a plurality of sub-bars organized into a plurality of bars, where each

35

sub-bar corresponds to a sub item slot group and has a height corresponding to the number of item slots of the sub item slot group, wherein the sub-bar has indication as to how many of the number of item slots are filled and how many of the number of item slots are unfilled; and,

5   displaying the plurality of meta item slot groups as a second histogram having a plurality of bars, where each bar corresponds to a meta item slot group and has a height corresponding to the number of item slots of the meta item slot group, wherein the bar has indication as to how many of the number of item slots are filled and how many of the number of item slots are unfilled.

10   15. The method of claim 13, wherein each item comprises an ad, each item slot group comprises a web site, each sub item slot groups comprises a viewer type of a web site, and each meta item slot group comprises at least one web site having similar characteristics, such that each item slot of the sub item slot group corresponds to an advertising space on the web site on which an ad can be shown to a particular viewer

15   type, each item slot of the item slot group corresponds to an advertising space on the web site on which an ad can be shown, and each item slot of the meta item slot group corresponds to an advertising space on a web site of the meta item slot group on which an ad can be shown.

    16. The method of claim 15, wherein the first type of the plurality of items comprises

20   member ads, and the second type of the plurality of items comprises sponsor ads.

17. The method of claim 13, wherein each of the plurality of the items of the first type

and each of the plurality of items of the second type has a fill quota, wherein allocating

each of the plurality of the items comprises filling a number of item slots that are unfilled

with the item equal to the quota.

5